

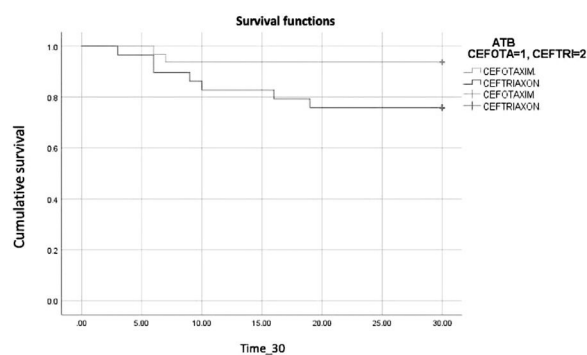


Figure 2. Kaplan Meyer survival curve with respect to type of antibiotic.

Source: Data extracted from records of the Gastroenterology Service of the Hospital General de México "Dr. Eduardo Liceaga".

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The role of the prognostic nutritional index as a prognostic factor in patients with hepatocellular carcinoma.

Wilma Hernandez-Garza, Berenice Lorenzo-Valle,
Kenia Michel Bastida-Guadarrama,
Santiago Camacho-Hernandez,
Fátima Higuera-de-la-Tijera

Department of Gastroenterology and Hepatology,
General Hospital of Mexico "Dr. Eduardo Liceaga",
Mexico City, Mexico

Introduction and Objectives: Immune-nutritional status has been demonstrated to be associated with prognosis in patients with various malignancies. The aim of this study is to determine the association of the nutritional prognostic index (PNI) with survival and assess the correlation between PNI and clinic-pathological parameters in HCC patients.

Materials and Patients: An observational, retrospective, descriptive and case series study was performed. We included 69 patients from a third-level hospital with a diagnosis of HCC from February 01, 2019 to July 24, 2023 and studied their survival 12 months after diagnosis. We determined the association between PNI status and their clinic-pathological characteristics and evaluated the impact of PNI on the HCC patient survival. The following formula was used to determine PNI: $10 \times \text{serum albumin (g/dL)} + 0.005 \times \text{total lymphocyte count (per } \mu\text{L)}$. Clinic-pathological characteristics related to disease prognosis included age, sex, body mass index (BMI), alpha-fetoprotein (AFP) value, the presence or not of cirrhosis, tumor size, ECOG score, and BCLC grade. Qualitative data are expressed as percentages and quantitative data as mean $\pm$ SD. Statistical comparison was performed with two-tailed unpaired Student's t-test or chi-square and Fisher's exact test. Statistical significance was defined as $P < 0.05$.

Results: Of the 69 patients diagnosed with HCC, most of the studied population was found to involve males at 56.52% while females were reported at 43.48%, with an age range of 26-81 years and a median age of 61.84, 61.84 ± 9.8 (59.53-64.15). Of the total sample, 10.14% were patients with no diagnosis of cirrhosis while 89.86% were patients with some degree of cirrhosis (Child Pugh Stages: A 37.68%, B 43.48%, C 8.70%). The results indicated that low PNI is associated with poor prognosis while high PNI was found to be beneficial for survival with a 95% CI = 35.48 ± 8.41 (32.42-38.54), 95% CI = 40.86 ± 5.42 (39.19-42.54) $p = 0.0019$, respectively. It is also associated with more favorable outcomes, such as lower AFP, lower ECOG grade and lower BCLC

staging ($p = 0.0371$, $p = 0.0303$, $p = 0.002$), respectively. However, we found that age, sex, presence or absence of cirrhosis, BMI and tumor size were not statistically significantly associated with the PNI value.

Conclusions: PNI is an independent predictive indicator of survival and is significantly associated with serum AFP, ECOG score, and BCLC stage in patients with HCC.

Ethical statement: The research was carried out in accordance with the Helsinki Declaration of the World Assembly 2013.

Declaration of interests: None.

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Clinical and demographic characteristics of liver transplant recipients who develop steatosis in the liver allograft.

Edgar A. Quezada-Cornejo¹,
María F. Hernández-Torres¹,
Pedro A. López-Hernández¹,
Alma L. Kuljacha-Gastelum²

¹ Department of Gastroenterology, High Specialty Unit
25, Monterrey, NL, Mexico

² Gastroenterology, Hepatology & Liver Transplant,
Ángeles Valle Oriente Hospital, Monterrey, NL, Mexico

Introduction and Objectives: Liver steatosis (LS) can develop in liver transplant (LT) recipients, with different studies reporting prevalence of 30-60%, our country has a high prevalence of the components of metabolic syndrome. The objective of this study is to describe the characteristics of liver transplant recipients who develop steatosis.

Materials and Patients: Retrospective, transversal and descriptive study in which 28 LT recipients with diagnosis of LS after LT were included, data was retrieved from patients clinical file and the following data were considered: age, sex, history of obesity, arterial hypertension, diabetes mellitus (DM), dyslipidemia and metabolic syndrome (MS) prior and after LT. Other data included were etiology of cirrhosis, immunosuppressive treatment and liver biochemistry at the moment of diagnosis.

Results: A statistic sample of 28 LT recipients who developed LS after LT was analyzed, 12 were male (42.9%) and 16 female (57.1%) with a medium age of 52 (27-74). The medium of post-LT years at diagnosis was 8 years (1-19). Etiology of cirrhosis was autoimmune in 14 (50%) patients, viral in 6 (21.4%), steatosis in 4 (13.8%) and alcohol in 4 (13.8%), the diagnostic method was imaging in 15 (53.6%) patients and biopsy in 13 (46.4%). The medium body mass index (BMI) was 28.6 (22-39), presence of pre-LT DM in 4 (13.8%) patients and post-LT DM in 15 (53.6%), pre-LT and post-LT obesity was found in 5 (10.7%) and 15 (53.6%) patients, respectively, pre-LT and post-LT arterial hypertension in 3 (10.7%) and 11 (39.3%) patients respectively, pre-LT and post-LT dyslipidemia in 0 (0%) and 22 (78.6%) respectively, pre-LT and post-LT MS in 0 (0%) and 15 (53.6%) respectively. 24 (85.7%) patients used prednisone at diagnosis with a medium dose of 11.8 milligrams (5-30). Previous to diagnosis, 24 (85.7%) received tacrolimus and 23 (82.1%) sirolimus. Liver biochemistry showed the following mediums: ALT 85.3 (16-406), 50.5 (14-273), ALP 139.8 (38-519), GGT 237 (11-2296) and TBIL 0.7 (0.2-1.5).

Conclusions: This study highlights the frequency with which metabolic comorbidities after LT presented in comparison to the ones presented before LT, especially DM, obesity and dyslipidemia. Concluding, LT recipients should be tightly monitored for these metabolic parameters to prevent LS in a timely manner.

Ethical statement: The identification of patients was protected; informed consent was obtained.